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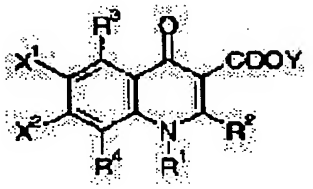
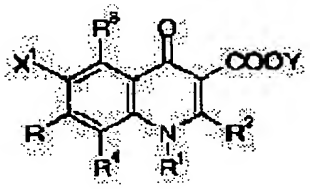
(54) PRODUCTION OF QUINOLONE-CARBOXYLIC ACID

(57)Abstract:
PROBLEM TO BE SOLVED: To efficiently obtain a quinolone-carboxylic acid having excellent antimicrobial activities, pharmacokinetics and safety by reacting specific two species of compounds, if needed, in the presence of a base under pressurization.
SOLUTION: A compound of formula II is obtained by reacting under pressurization (A) a compound expressed by formula I [R1 is a 1-6C alkyl, a 2-6C alkenyl or the like; R2 is H, a 1-6C alkylthio, R2 and R1 unite together to form a (S-containing, substituted) cyclic structure including a portion of the mother nucleus; R3 is H, a (substituted) amino or the like; R4 is H, a halogen or the like, R4 and R1 unite together to form a (O-containing, substituted) cyclic structure including a portion of the mother nucleus; X1 is a halogen or H; X2 is a halogen; Y is H, phenyl, acetoxymethyl or the like] with (B) a compound expressed by formula R-H [R is a single cyclic, dicyclic or tricyclic (N and the like-containing, substituted) saturate or a partially saturated N-containing heterocyclic substituent in which the N is a bonding site] and (C) if needed, in the presence of a base.



I



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LEGAL STATUS

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